

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

IN RE: CEDAR FALLS UTILITIES	DOCKET NO. E-21647
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**ORDER ESTABLISHING PROCEDURAL SCHEDULE, PROPOSING TO TAKE
OFFICIAL NOTICE, AND NOTICE OF HEARING**

(Issued January 11, 2005)

On May 27, 2004, Cedar Falls Utilities (Cedar Falls) filed a petition with the Utilities Board (Board) requesting a franchise to erect, maintain, and operate a 161 kilovolt (kV) (169 kV maximum) electric transmission line approximately 2.5 miles long proposed to be constructed in Black Hawk County, Iowa. The proposed transmission line would connect Cedar Falls' existing Union Substation to a new Industrial Park Substation. Cedar Falls amended its petition on June 4, 2004.

Cedar Falls does not request the right of eminent domain. Two objections to the petition have been filed with the Board as of the date of this order. Iowa Code § 476.6 requires a hearing to be held in an electric transmission line franchise proceeding if objections to a franchise petition are filed or if eminent domain is requested.

On December 23, 2004, the Board issued an order assigning this case to the undersigned administrative law judge to establish a procedural schedule, schedule a

hearing, and exercise the authority provided in 199 IAC 7.1(4). The Board found that the hearing should be held in Waterloo, Iowa, pursuant to Iowa Code § 476.6.

THE BOARD'S AUTHORITY AND JURISDICTION

The Board has the authority to grant franchises to construct, erect, maintain, and operate transmission lines capable of operating at an electric voltage of 69 kV or more along, over, or across any public highway or grounds outside of cities for the transmission, distribution, or sale of electric current. Iowa Code § 478.1. The Board may grant franchises in whole or in part upon such terms, conditions, and restrictions, and with such modifications as to line location and route, as may seem to it just and proper. Iowa Code § 478.4. To obtain a franchise, the petitioner must show that the proposed line or lines are necessary to serve a public use and represent a reasonable relationship to an overall plan of transmitting electricity in the public interest. Iowa Code § 478.4.

THE ISSUES

In petition Exhibit D, Cedar Falls discusses the purposes of the proposed line. Cedar Falls states that one purpose of the project is to provide a high voltage source to the new substation being built to serve the growing load in the Cedar Falls Industrial and Technology Parks. It states a second purpose is to complete a 161 kV transmission line loop around the west and south sides of the Cedar Falls/Waterloo

metropolitan area to enhance reliability of the transmission system for all electric customers in the metro area.

Cedar Falls must demonstrate that the proposed transmission line is necessary to serve a public use. Iowa Code § 478.4. It must also show the proposed line represents a reasonable relationship to an overall plan of transmitting electricity in the public interest. Iowa Code § 478.4. Cedar Falls must demonstrate that the transmission line is proposed to be constructed near and parallel to roads, to railroad rights of way, or along division lines of land, wherever practical and reasonable, and so as not to interfere with the public use of the highways or streams of the state, nor unnecessarily interfere with the use of any lands by the occupant. Iowa Code § 478.18. Cedar Falls must also show that the proposed lines conform to the construction and safety requirements of Iowa Code §§ 478.19 and 478.20 and applicable Board rules at 199 IAC 11 and 25. In addition, the undersigned will determine whether any terms, conditions, and restrictions on the franchise, if granted, should be imposed, and whether modifications of line location and route would be just and proper. Iowa Code § 478.4.

Any person whose rights may be affected by the proposed transmission line may file an objection with the Board. Iowa Code § 478.5. Objections must be filed in writing with the Board no later than twenty days after the date of last publication of the notice required by Iowa Code § 478.5. The following objections have been filed

as of the date of this order. The issues raised in these objections, and any issues that may be raised in objections filed in the future, are also issues in the case.

Ms. Lorraine Joens filed an objection on September 2, 2003. As stated on page 6 of the report by Mr. Dennis Hockmuth attached to this order, it is somewhat unclear what Ms. Joens means by harmful emissions from the line. The undersigned administrative law judge requests that Ms. Joens file a written clarification of her objection according to the procedural schedule below. However, even if Ms. Joens does not file such written clarification, Cedar Falls must present evidence regarding electric and magnetic field exposures as discussed in Mr. Hockmuth's report and must address the alternate route proposed by Ms. Joens.

Ms. Diane Schou and Mr. Bert Schou filed an objection to the proposed transmission line on September 2, 2003, and filed additional information regarding their objection on October 29, December 8, and December 22, 2003. On April 29, 2004, Cedar Falls filed a request that Ms. Schou be disqualified as an objector. Iowa Code § 478.5 provides that any person whose rights may be affected may file a written objection. The issues raised in the objection and discussed in Cedar Falls' request for disqualification are issues that should be addressed in prepared testimony and at the hearing by both the Schous and Cedar Falls. Therefore, the request for disqualification is denied. It appears that much of the information provided by the Schous relates to cellular telephones and cellular towers. The Schous should address whether and how this information is relevant to this

proceeding involving a proposed electric transmission line. If Cedar Falls takes the position that the information regarding cellular telephones and cellular towers is irrelevant to this case, it must provide evidence and argument to support its position.

PREPARED TESTIMONY AND EXHIBITS

All parties will be given the opportunity to present evidence and argument on all issues involved in this proceeding, and to respond to evidence presented by opposing parties. Parties may choose to be represented by counsel at their own expense. Iowa Code § 17A.12(4). The proposed decision and order that the undersigned administrative law judge will issue in this case must be based solely on evidence contained in the record and on matters officially noticed in the record. Iowa Code §§ 17A.12(6) and (8). Unless contrary arrangements are made on the record at the hearing, all evidence will be received at the hearing, and the record will be closed to any further evidence at the conclusion of the hearing.

The submission of prepared evidence prior to hearing will help to identify disputed issues of fact to be addressed at the hearing. Prepared testimony contains all statements that a witness intends to give under oath at the hearing, set forth in question and answer form. When a witness who has submitted prepared testimony takes the stand, the witness does not ordinarily repeat the written testimony or give a substantial amount of new testimony. Instead, the witness is cross-examined by the other parties concerning the statements already made in writing. The use of prepared testimony prevents surprise at the hearing and helps each party to prepare

adequately for the hearing, so that a full and true disclosure of the facts can be obtained. Iowa Code §§ 17A.14(1), 17A.14(3) and 478.4. This procedure also tends to diminish the length of the hearing and spares the parties the expense and inconvenience of additional hearings.

Cedar Falls must file prepared direct testimony and exhibits prior to the hearing in conformance with the procedural schedule set forth below. At a minimum, Cedar Falls' prepared testimony must address the issues listed above and the issues identified in the attached report by Mr. Dennis Hockmuth dated November 23, 2004. Cedar Falls must also address the issues identified in the written objections that have been filed in this docket, including addressing each of the alternate routes suggested in the objections. Cedar Falls must discuss the various routes it considered and explain why it chose the proposed route.

In addition, if additional objections are filed in this case, Cedar Falls' prepared direct testimony must respond to issues raised in all written objections that are received by Cedar Falls at least seven (7) days before the deadline for filing Cedar Falls' prepared testimony. New written objections filed with the Board and received by Cedar Falls less than seven (7) days before the deadline for filing Cedar Falls' prepared direct testimony, or received by Cedar Falls after it files its prepared direct testimony and at least seven (7) days prior to the deadline for filing Cedar Falls' prepared rebuttal testimony, must be addressed in Cedar Falls' prepared rebuttal testimony.

The Consumer Advocate Division of the Department of Justice (Consumer Advocate), and any objectors may also file prepared testimony and exhibits before the hearing in accordance with the procedural schedule in this order.

Parties other than Cedar Falls who choose not to file prepared testimony and exhibits before the hearing will not be precluded from participating in the proceedings. If an objector, for example, does not intend to present evidence going substantially beyond the information contained in the letter of objection, it is unnecessary for the objector to file prepared testimony. However, when a party (including an objector) has a substantial amount of information to present to the Board about the petition, if the information has not been previously disclosed to the Board, it should be presented in the form of prepared testimony and exhibits according to the procedural schedule established below. Similarly, if the Consumer Advocate takes the position that Cedar Falls should not be granted the franchise, or that restrictions on the grant should be imposed, it must file prepared testimony or a brief in support of its position according to the procedural schedule.

PARTIES AND OBJECTORS

Cedar Falls and the Consumer Advocate are parties to this proceeding. Iowa Code §§ 17A.2(8) and 475A.2. As of the date of this order, two objections to the petitions have been filed with the Board. The Board has received objections from Ms. Lorraine Joens and Mr. Bert and Ms. Diane Schou.

The objectors, and anyone else who files an objection pursuant to this order and Iowa Code §§ 478.5, is presumed to be a party to this case. However, no objector is entitled to party status merely because that person has written a letter. To qualify as a party, the objector must be able to demonstrate some right or interest that may be affected by the granting of the franchise. Iowa Code §§ 478.5, 17A.2(5) and (8). An objector's status as a party may be challenged at the hearing, and an objector who cannot demonstrate a right or interest that may be affected by the granting of the franchise will no longer be considered a party. Therefore, at a minimum, objectors should be prepared to give evidence at the hearing that will explain the nature of their specific rights or interests they believe should be protected, and that shows how their rights or interests will be affected by the transmission line. As discussed above, to the extent that this evidence goes substantially beyond information already communicated to the Board in an objection letter, it should be written down and filed as prepared testimony according to the procedural schedule established below.

Objections must be made in writing and filed with the Executive Secretary of the Utilities Board, 350 Maple Street, Des Moines, Iowa 50319-0069.

Because objectors will be presumed to be parties up to the time of the hearing, an objector will receive copies of all documents that are filed in this docket after the letter of objection has been filed with the Board. If a person files an objection after some or all of the prepared testimony and exhibits have already been filed, that

person will not receive copies of the previously filed documents. If a person files an objection after some or all of the prepared testimony and exhibits have already been filed with the Board by other parties, the objector should make direct contact with the parties who have already filed prepared testimony and exhibits in order to obtain a copy of those materials.

The official file of this case will be available for inspection at the Utilities Board Records and Information Center, 350 Maple Street, Des Moines, Iowa.

199 IAC 1.9(1). Copies may be obtained, and there will be a charge to cover the cost of copying.

If it has not already done so, Cedar Falls must serve a copy of the most current petition on each of the two objectors who filed an objection prior to the date of this order.

After an objector has filed a letter of objection, all further communications from the objector to the Board having to do with this case (including motions or prepared testimony and exhibits) must be sent to the Executive Secretary. A party (including objectors) must file an original and four¹ copies of each communication with the Executive Secretary, and the party must send one copy to each of the other parties to this case, except three copies must be served on the Consumer Advocate. 199 IAC 1.8. Along with the communication being sent, the party must file with the Board a

¹ 199 IAC 1.8(d) states that an original and three copies must be filed in electric line cases, but also provides that the Board may request additional copies. In this case, an original and four copies of each document are needed for Board review.

certificate of service that conforms to 199 IAC 2.2(16), that verifies a copy of the document was served upon the other parties.

These procedures are necessary to comply with Iowa Code § 17A.17, which prohibits ex parte communication. Ex parte communication is when one party in a contested case communicates with the judge without the other parties being given the opportunity to be present. In order to be prohibited, the communication must be about the facts or law in the case. Calls to the Board to ask about procedure or the status of the case are not ex parte communication. Ex parte communication may be oral or written. This means the parties in this case may not communicate about the facts or law in this case with the undersigned administrative law judge unless the other parties are given the opportunity to be present, or unless the other parties are provided with a copy of the written documents filed with the Board.

The parties should examine Iowa Code Chapter 478, 199 IAC 11 and 25, and 199 IAC 1.8 for other substantive and procedural rules that apply to this case. There are links to the Iowa Code and the administrative rules on the Board's website at www.state.ia.us/iub.

PROPOSAL TO TAKE OFFICIAL NOTICE

Mr. Dennis Hockmuth, Utility Regulatory Engineer for the Board, has prepared a report in the form of a memo dated November 23, 2004, concerning Cedar Falls' petition pursuant to Iowa Code § 478.4. A copy of the report is attached to this order. Pursuant to Iowa Code § 17A.14(4), the undersigned administrative law judge

proposes to take official notice of the report and of the facts contained therein, thus making them a part of the record of this case. Iowa Code §§ 17A.12(6)(c), 17A.14(4). Any party objecting to the taking of official notice of the report must file such objection as soon as possible, and no later than five days prior to the hearing. The parties will have the opportunity to contest any information contained in the memo in prefiled testimony and at the hearing, and they may also cross-examine Mr. Hockmuth concerning the contents of his report at the hearing.

IT IS THEREFORE ORDERED:

1. If it has not already done so, Cedar Falls must serve a copy of the most current petition on each of the two objectors who filed objections prior to the date of this order.
2. Each person who files a letter of objection to Cedar Falls' petition in this docket will be presumed to be a party in the proceeding unless it is established at hearing that the objector has no right or interest that may be affected by the grant or denial of the franchise.
3. Objections must be made in writing and filed with the Executive Secretary of the Utilities Board, 350 Maple Street, Des Moines, Iowa 50319-0069. Objections must be filed no later than 20 days after the date of last publication of notice unless good cause is shown for the late filing. Objectors must file an original and four copies of all subsequent communications to the Board with the Executive Secretary, and must send a copy of each communication to the other parties in the

case, except three copies must be served on the Consumer Advocate. Along with the communication being sent, the party must file with the Board a certificate of service that conforms to 199 IAC 2.2(16), that verifies a copy of the document was served on the other parties.

4. The following procedural schedule is established:

a. On or before January 31, 2005, Cedar Falls must file prepared direct testimony and exhibits relating to its petition for franchise as discussed above. In its prepared testimony, Cedar Falls must address the issues discussed in the body of this order. If it files exhibits, Cedar Falls should use exhibit numbers one and following. If it chooses to file a prehearing brief, Cedar Falls must file it on or before January 31, 2005.

b. On or before February 18, 2005, the Consumer Advocate and any objector may file prepared responsive testimony. If the Consumer Advocate takes the position that Cedar Falls should not be granted the franchise, or that restrictions on the grant should be imposed, it must file prepared testimony or a brief in support of its position on or before February 18, 2005. If it files exhibits, the Consumer Advocate should use exhibit numbers one hundred and following. If any objector files exhibits, the objector should use exhibit numbers starting with the person's initials and numbers 200 and following, such as "Exhibit LJ-200" etc.

c. On or before March 1, 2005, Cedar Falls may file prepared rebuttal testimony and exhibits.

d. If any party wishes to file a brief responding to those previously filed or supplementing its previously filed position, it must do so on or before March 1, 2005.

e. A public hearing for the presentation of evidence and the cross-examination of witnesses concerning the issues identified in this notice of hearing will be held beginning at 10:30 a.m. on Monday, March 14, 2005, in the R.J. McElroy Trust Room of the Grout Museum of History & Science, 503 South Street, Waterloo, Iowa 50701. Each party must provide a copy of its prepared testimony and its exhibits to the court reporter at the hearing. Persons with disabilities who will require assistive services or devices to observe this hearing or participate in it should contact the Utilities Board at (515) 281-5256 as soon as possible and at least five days in advance of the hearing date to request that appropriate arrangements be made.

5. Required number of copies. All parties must file an original and four copies of all documents filed with the Board. 199 IAC 1.8(4)"d."

6. The undersigned administrative law judge proposes to take official notice of Mr. Hockmuth's report dated November 23, 2004, attached to this order, and of the facts contained therein. Any party objecting to the taking of official notice

of the report should file such objection as soon as possible, and must file such objection no later than five days prior to the hearing.

7. Pursuant to Iowa Code § 478.6, a copy of this order will be served by ordinary mail upon Cedar Falls, the Consumer Advocate, and the two objectors who filed written objections prior to the date of this order.

UTILITIES BOARD

/s/ Amy L. Christensen
Amy L. Christensen
Administrative Law Judge

ATTEST:

/s/ Judi K. Cooper
Executive Secretary

Dated at Des Moines, Iowa, this 11th day of January, 2005.

**IOWA UTILITIES BOARD
Safety & Engineering Section**

Docket No.: E-21647
Utility: Cedar Falls Utilities
Date: November 23, 2004

TO: The File

FROM: Dennis P. Hockmuth, P.E.

SUBJECT: Staff Report on Cedar Falls Utilities 161,000 volt Electric Transmission Line near Cedar Falls in Black Hawk County, Iowa.

I. General Background

On August 12, 2003, Cedar Falls Utilities (CFU) held an informational meeting (IM), pursuant to IOWA CODE § 478.2, in Cedar Falls, Iowa, concerning approximately 2½ miles of three phase 161,000 volt (161 kV) electric transmission line proposed for construction in Black Hawk County, Iowa. CFU's presentation stated that the project would provide a second source of power to the existing Union Substation and provide power to the new Industrial Park Substation. The entire project would include a new section of transmission line from the Industrial Park Substation to MidAmerican Energy's existing Deere Engine Substation, the latter segment within the City Limits of Cedar Falls and Waterloo and not subject to an Iowa Utilities Board (the Board) franchise. Staff also examined the proposed route as presented at this meeting.

Following the IM, two objections to the project were filed with the Board on September 2, 2003, and three subsequent letters were later submitted by one of those parties. Both parties opposed the line's construction nearby. On April 29, 2004, CFU filed a letter seeking "disqualification" of Diane Schou as an objector.

On May 27, 2004, CFU filed a petition for an electric franchise. CFU has acquired all of the necessary easements voluntarily for the placing of the proposed 2.5 mile electric transmission line. After the filing of the original Petition and Exhibits, Board staff advised CFU of deficiencies in the filed documents. The petition and exhibits were later revised, with final amendments filed June 4, 2004. Subsequently, staff again examined the proposed route, the properties of the two objectors located along that route, and other alternative routes on June 17, 2004.

II. The Petition

On May 27, 2004, CFU filed a petition for electric franchise for a 161 kV electric transmission line between its existing Union Substation in the western portion of Cedar Falls and a new Industrial Park Substation at the south side of Cedar Falls. The total project line length, subject to Board franchise outside of the City of Cedar Falls, is 2.5 miles.

After exchanges of letters between Board staff and CFU, appropriate answers and petition amendments corrected errors and clarified or updated the content of the filing. Docket No. E-21647 was considered by staff to be in sufficient order to set for hearing following amendments filed on June 4, 2004.

The petition includes the following content:

FORM OF PETITION

This document requests granting of a franchise, introducing the exhibits, and makes certain statements concerning the project and process.

Exhibit A

Contains a legal description of the route based on the government land survey system (section, township, range). This information is included in the published notice of the franchise petition, and is attached to the franchise issued by the Board as the record of the approved line location. 199 IAC 11.2(1)"a".

Exhibit B

A map of the route showing the proposed electric line location and its relationship to natural, public, utility, and private features of the area being crossed. 199 IAC 11.2(1)"b".

Exhibit C

Engineering specification information and drawings. 199 IAC 11.2(1)"c".

Exhibit D

Contains information required by IOWA CODE § 478.3, including need and planning issues. 199 IAC 11.2(1)"d". CFU's Exhibit D stated that the purpose of its proposed line would provide a high voltage source to the new substation to serve the growing load in the Cedar Falls Industrial and Technology Parks, which would assure present and future business of an adequate power supply. CFU further asserts the proposed line would complete a loop around the west and south sides of Waterloo/Cedar Falls metropolitan area and would enhance the reliability of its transmission system.

Exhibit E

This exhibit provides specific information on properties that would be the subject of an eminent domain request. As CFU is not requesting the right of eminent domain, no Exhibit E was filed. 199 IAC 11.2(1)"e".

Exhibit F

A showing that notice of the petition filing was made to the owners of potentially affected utilities and other infrastructure near the route. 199 IAC 11.2(1)"f".

Exhibit G

An affidavit required by IOWA CODE § 478.3 stating that required informational meeting was held and provided the copy of the form of notice used. 199 IAC 11.2(1)"g".

IOWA CODE § 478.6 states that a public hearing must be held if an objection is filed or if eminent domain is requested. Two parties have filed objections. All of the necessary easements were acquired voluntarily, thus CFU made no eminent domain request in Exhibit E. However, since objections are on file, a hearing is required.

IOWA CODE § 478.6 further states that when a hearing is required, if a proposed line is more than a mile long, the hearing must be held in the county seat of the county at the midpoint of the proposed line. This proposed project is in Black Hawk County so the hearing must be held in Waterloo.

III. Description of Project

The proposed project is 2.5 miles (outside of the City of Cedar Falls) of 161 kV electric transmission line originating at CFU's existing Union Substation and terminating at the proposed new Industrial Park Substation, both of which are inside the corporate limits of Cedar Fall, Iowa. CFU's total project will also include a new section of 161 kV transmission line between the Industrial Park Substation and MidAmerican Energy's Deere Engine Substation in Waterloo. The Board has no jurisdiction over this latter segment, since it is within the city limits of Cedar Falls and Waterloo, per IOWA CODE § 478.1.

CFU's new 161 kV circuit will also have a single phase 7.2 kV distribution "underbuild" line to be constructed on the same set of poles on the same electric transmission line right-of-way.

The majority of the line will consist of single wooden poles, 65 to 95 feet tall, with an average spacing of 265 feet and a maximum span of 312 feet. The corner pole and perhaps angle poles will be steel structures bolted to a concrete foundation. It appears no anchors or guy wires would be attached to the steel poles themselves. Although the record is not clear, it appears that the poles of the proposed route would be placed in

public right-of-way with conductor overhang and/or conductor “blow-out” onto adjoining private property. It is staff’s understanding that the width of the proposed overhang right-of-way is 20 feet.

For clarity, CFU should provide evidence in prefiled testimony or at hearing about the location of the wooden or steel structures, conductors, and possible guys & anchors. Also verify the width of the overhang easement.

The three 161 kV transmission conductors will be supported on individual horizontal post insulators that would extend about 70 inches away from the pole. The 7.2 kV distribution line will be mounted on a 10 foot long crossarm attached about 9 feet below the lowest transmission conductor on the same pole. Under worst case conditions, the distribution conductors will be at least 18.5 feet above the ground or roads being crossed. The proposed lines will be protected from lightning by a shield wire at the top of the pole.

Staff review has concluded that the design of the proposed facilities as described in Exhibit C is consistent with the National Electrical Safety Code and other safety provisions adopted by the Board in rule 199 IAC 25.2.

IV. Requirements of IOWA CODE § 478.4

Under IOWA CODE § 478.4, to grant a franchise the Board “shall make a finding that the proposed line or lines are necessary to serve a public use and represents a reasonable relationship to an overall plan of transmitting electricity in the public interest.”

a. Necessary to serve a public use

Board requirements in rule 199 IAC 11.2(1) “d” require that CFU provide in Exhibit D an allegation, with supporting testimony, that the proposed line is necessary to serve a public use. It is also required in IOWA CODE § 478.3(1) “h”. CFU indicates this project will provide a high voltage source to the new substation to serve the growing power load needs in the area. This 161 kV line will complete a loop around the west and south sides of Waterloo/Cedar Falls in the Black Hawk County metropolitan area to enhance the reliability of the transmission system for all electric customers. Both CFU and MidAmerican Energy Company support and are working on the interconnection agreement and facilities in this project.

b. Represents a reasonable relationship to an overall plan of transmitting electricity in the public interest

Board requirements in rule 199 IAC 11.2(1) “d” require that CFU provide in Exhibit D the responses to a series of issues that IOWA CODE § 478.3(2) “a” through “h” require. CFU has provided allegations that contain information to support its “reasonable

relationship” finding. CFU indicates that both the present and future residential and industrial economic growth in the area calls for the proposed line, and the existing facilities could not provide this. CFU states that the fixed ending points call for a route that would impact the fewest members of the public at the lowest cost to its customers. The proposed line being franchised will be built in public road right-of-way in areas zoned agricultural and light industrial, consistent with present and future land use.

V. The Route

The location of the proposed route is described in Petition Exhibits A and B. The proposed 161 kV transmission line will start at CFU’s existing Union Substation (at 406 Union Road), which is inside the city limits at the western edge of Cedar Falls, then run south for about three miles along the east side of Union Road within town to a point just south of University Avenue. At this point the route crosses to the west side of Union Road and exits the city limits.

The route then continues south along the west side of Union Road for 1.5 miles to the north margin of West Ridgeway Avenue. The poles will be placed in the public road right-of-way. It appears there are 2 or 3 houses along the west side of this segment of Union Road.

The proposed line would then continue east in public road right-of-way along the north margin of West Ridgeway Avenue for one mile, where it re-enters the city limits. It appears there are 2 houses along the north side of that segment of West Ridgeway Avenue outside of town. There are also two houses, with other buildings, on the south side of West Ridgeway Avenue across the road from the proposed route. Within Cedar Falls the route continues along the north margin of West Ridgeway Avenue for about 1.3 miles to the new Industrial Park Substation (at 605 W. Ridgeway Avenue).

The 2.5 miles of transmission line outside of Cedar Falls, for which the franchise is being sought, is along rolling agricultural land. An existing 7.2 kV distribution line parallels the proposed transmission line route, mostly on the opposite side of the road. It will be transferred to the new 161 kV line and only one electric facility will remain in that 2.5 mile segment.

Exhibit D provides general reasons for the route selection, but does not provide details. During the informational meeting CFU discussed other alternate routes, but these were not explained in Exhibit D. The objectors also proposed multiple alternate routes, many of which are inside the City Limits of Cedar Falls. Staff only considered the routes outside of town over which the Board has authority.

Staff did inspect the objectors’ suggestion of a route along east-west Viking Road, one mile north of West Ridgeway Ave. Viking Road has right-of-way only 66 feet wide

compared to the 100 foot width of West Ridgeway Ave. There are numerous trees next to and over hanging both sides of the west three quarter mile segment of Viking Road. A single phase distribution line is currently located along the south side of that road, but more tree removal or drastic trimming would be required if the proposed 161 kV line route would be placed there. There are numerous residential homes, within 100-150 feet of the proposed 161 kV line on both sides of that Viking Road segment. Based upon the informational available to date, Staff would not choose this as a primary route.

CFU should provide in its prefiled testimony or at hearing information on other routes that were considered and why they were not selected. CFU should also respond to the route alternatives proposed by the objectors.

IOWA CODE § 478.18(2) contains these provisions for the routing of electric lines:

A transmission line shall be constructed near and parallel to roads, to the right-of-way of the railways of the state, or along the division lines of the lands, according to the government survey, wherever the same is practicable and reasonable, and so as not to interfere with the use by the public of the highways or streams of the state, nor unnecessarily interfere with the use of any lands by the occupant.

CFU's proposed line route follows roads and is "along the division lines of the lands, according to the government survey."

VI. Eminent Domain

IOWA CODE § 478.15 gives the Board the authority to grant the right of eminent domain "to such extent as the utilities board may approve, prescribe and find to be necessary to serve a public use." The Petition and included exhibits show that CFU does not request eminent domain and all voluntary easements have been acquired. Nothing further is required on this issue.

VII. Objections

After the informational meeting, two parties filed objections with the Board. One of the parties submitted a series of additional objections concerning their two parcels of property. The stated reasons for objection were concerns over the possible health risks of electric fields, electromagnetic sensitivity, reduction of property values, and effect on crops.

Joens

On September 2, 2003, an objection was filed by Lorraine Joens, owner of a rural farmstead southwest of Cedar Falls. The proposed CFU electric transmission line would pass along and within the north public road margin of West Ridgeway Avenue, along the south side of the Joens property. It is staff's understanding that there will be a 20 foot overhang right-of-way easement on the Joens property. The objection expressed concerns that the line would "give off harmful emissions (sic) if closer that 100 feet from a home." The residence is less than 100 feet from the edge of the proposed lines. She will be walking to the road for mail or mowing under the line. She suggested an alternate route using Viking Road to either Hudson Road or Highway 58, instead of Ridgeway Ave.

CFU is not requesting eminent domain to obtain an easement on her property. This presumably means CFU has obtained an easement from Ms. Joens for this project; however, the signing of an easement does not negate or diminish an objection.²

It is unclear what Ms. Joens means by "emissions", presumably meaning "emissions." In past cases before the Board, persons have expressed concern over whether long term exposure to electromagnetic fields (EMF) from electric lines can have health effects. This is not the same thing as the electromagnetic sensitivity issue raised in the Schou objections. It is unclear if Ms. Joens means EMF in the usual sense or if she means electromagnetic sensitivity, which as a neighbor to the Schous could be what she was thinking of. *Staff suggests that the order setting hearing ask Ms. Joens what she means by the term if she wishes to go forward with this objection. This would enable CFU and the IUB to appropriately address her concern.*

Schou

Diane D. and Bert Schou have filed a series of objections in this docket in relation to adjoining properties they own (addressed at 6621 West Ridgeway Avenue and 6117 West Ridgeway Avenue) southwest of Cedar Falls. They apparently live at 6117 West Ridgeway but have a business office and another house at the 6621 address. The two locations are about a half mile apart. The proposed CFU electric transmission line would not run across their property, but rather along the north public road margin of West Ridgeway Avenue, on the opposite side of the road from their property.

The first letter of objection from the Schous was filed on September 2, 2003. The main points of the letter were:

- Diane Schou is "extremely electromagnetic sensitive" and has been affected by transmissions from a recently built cell phone tower. An attached letter from a

² "Decision and Order Granting Franchise" in Dockets No. E-21043, E-21044, E-21045, issued to MidWest Power on March 9, 1993.

doctor stated that she “has headaches that seem to have a definite relationship to the proximity of telephone transmission towers.” Their West farm (6221 W. Ridgeway Ave.) is also their agriculture research station/business, and she would be close to the proposed power lines numerous times (several hours) a day. Concern was expressed that high power electric transmission line emission exposure would create additional sensitivity.

- Because they live and operate an agricultural research business across the road from this route, exposure to its emissions would be unavoidable.
- Land value would be reduced.
- The line could have unknown effects on agriculture and the products of their operations.
- Other routes were suggested, all of which would move the line somewhere north of their property.

The second letter was filed on October 29, 2003. This letter asserts Ms. Schou is seriously affected by power transmission lines, including an existing line in the Cedar Falls area that would be similar to the one proposed. She could hardly leave home if the proposed line were built. Alternate routes, with some changes from those suggested previously, were again proposed.³

The next letter was dated December 8, 2003. It contends electrical power lines, especially high power transmission lines, injure Ms. Schou and driving parallel to or underneath them is painful. An electric line along the road going from their house to their offices will cause injury. They had apparently been in contact with CFU concerning the route but were unsuccessful in seeking relocation. Alternate routes were again promoted.

The final letter was received December 22, 2003, and alleges Ms. Schou has now grown sensitive to electric space heaters and water heaters.

On April 29, 2004, CFU filed a letter seeking “disqualification” of Diane Schou as an objector.⁴ CFU stated that the line would not be on the Schou property, and that their house and office would be 400 and 250 feet away, respectively. Based on measurements taken along an existing CFU 161 kV line, EMF at that distance would be negligible - zero to 0.3 milligauss (mG), “well below any field strength even remotely alleged to be hazardous.” The field strength on the roadway is projected to be 3 to 4 mG. CFU contends that while at CFU offices Ms. Schou was in a room, which had about 3 mG, and was in a parking lot that had levels of up to 14 mG, without discomfort. *The standing of the Schous is a legal matter, which technical staff must leave to the presiding officer of the hearing in this docket.*

³ This letter also makes reference to a letter of October 21. The Board did not receive any letter from the Schous on that date or with that date on it.

⁴ Copies of the CFU letter were not served upon the Schous or OCA. Board staff forwarded copies to them.

In other contested electric franchise dockets the Board has received objections from persons who expressed concern over whether long term exposure to elevated electromagnetic fields (EMF) from electric lines can have health effects. This is not the same thing as the hypersensitivity issue now being raised. This is the first time in staff memory that a hypersensitivity to electromagnetic fields has been claimed.

Ms. Schou has filed a statement from a doctor finding an apparent relationship between her headaches and the proximity of telephone transmission towers. The Schous also attached to their objections a number of articles from the internet regarding sensitivity to and discomfort from electromagnetic emissions by some individuals. However, these articles primarily considered cell tower or cell phone⁵ – microwave frequency - or other radio frequency (RF) emissions. RF and electric line emissions are quite different. Cell phones operate in the 800-900 megaHertz (MHz) range – a MHz is one million cycles per second. This is a high energy signal designed to travel long distances. The alternating electrical current in an electric line produces 60 Hertz (60 cycles per second) fields, sometimes referred to as extremely-low-frequency (ELF), where the EMF drops off rapidly with distance from the source. A couple of the articles provided attempt to extend RF contentions to cover ELF EMF as well, or to claim ELF EMF sensitivity as a separate malady. However, it is unclear how much mainstream medical or scientific support there is for such argument.⁶

The magnetic field information provided by CFU appears to indicate rather low magnetic field levels. According to one source, EMF-Link Information Ventures⁷, “Several EMF epidemiological studies have used 2 or 3 mG as a cut-off point to define broad categories of exposure. Below this level, subjects are considered “unexposed,” . . .” and “A typical American home has a background magnetic field level (away from appliances) that ranges from 0.5 to 4 mG”.

However, Staff believes the EMF values provided by CFU require elaboration. First, they only provide data on magnetic fields. Similar information should be provided on electric fields. Second, the strength of magnetic fields varies with the current in the conductors, and it is unknown how representative the numbers CFU provided are. Also, the strength of EMF fields can vary with the arrangement of conductors, with more compactly arranged conductors generally producing smaller fields. There are computer models available that can predict field strengths.

In light of the Schou objections, in its prefiled testimony or at hearing, CFU should:

⁵ Including articles contending that the emissions from hand held cell phones can be dangerous.

⁶ A problem with internet research, including staff's, is that it is hard to know how much credibility the websites and articles found deserve.

⁷ Found at <http://infoventures.com/private/federal/q&a/qa-envn5.html>

- *Address the above objections including the numerous alternate route proposals, and an explanation of how and why the proposed route was selected.*
- *Provide the predicted electrical and magnetic field levels for the proposed line based on conductor arrangement and anticipated loads.*

VIII. Conclusion

Board staff finds the petition in this docket to be sufficiently in order to be set for hearing.

IOWA CODE § 478.6 states that a public hearing must be held if an objection is filed or eminent domain is requested. As objections are on file (no eminent domain was requested) in this docket, a public hearing is required.

IOWA CODE § 478.6 states that when a hearing is required, if the proposed line is more than a mile long the hearing must be held in the county seat of the county at the midpoint of the proposed line. The line exceeds a mile in length and is totally within Black Hawk County; therefore the hearing must be held in Waterloo.

This report identifies, in *italic print*, a number of areas that staff recommends CFU or objectors be instructed to address in prefiled testimony or at hearing to improve the record on which a decision will be based.